

## ABSTRACT OF THE DISCLOSURE

### METHOD FOR MANIPULATION OF SEMICONDUCTING LAYERS FOR THINNING

#### THESE LAYERS

This invention relates to a method for making a thin layer starting from a wafer comprising a front face with a given relief, and a back face, comprising steps consisting of:

- a) obtaining a support handle with a face acting as a bonding face;
- b) preparing the front face of the wafer, this preparation including incomplete planarisation of the front face of the wafer, to obtain a bonding energy  $E_0$  between a first value corresponding to the minimum bonding energy compatible with the later thinning step, and a second value corresponding to the maximum bonding energy compatible with the subsequent desolidarisation operation, the bonding energy  $E_0$  being such that  $E_0 = \alpha.E$ , where  $E$  is the bonding energy that would be obtained if the front face of the wafer was completely planarised,  $\alpha$  is the ratio between the incompletely planarised area of the front face of the wafer and the area of the front face of the wafer if it were completely planarised;
- c) solidarising the front face of the wafer on the bonding face of the support handle, by direct bonding;
- d) thinning the wafer starting from its back face until the thin layer is obtained;
- e) transferring the thin layer onto a usage support, involving separation from the support handle.

No figure.